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The Effect of Parental Discipline Style on Mothers' Perceptions of Social Skills and Learning Motivation

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Authors' contributions

This work was carried out in collaboration between all authors. Author RP designed the study, wrote the protocol and supervised the work. Author AG carried out all laboratories work and performed the statistical analysis. Author AG managed the analyses of the study. Authors RP and AG wrote the first draft of the manuscript. Author RP managed the literature searches and edited the manuscript. All authors read and approved the final manuscript.

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ABSTRACT

The reported research is a quantitative study examining the effect of parental discipline style and its four dimensions—Demandingness, Enforcement, Punishment and Responsiveness—on mothers' perceptions of their children's social skills and learning motivation. The sample consisted of 99 mothers and 129 children aged 8–12 years. It was found that each of the four dimensions of parental discipline style was positively correlated with learning motivation and social skills after controlling for sociodemographic background variables. Learning motivation was the most strongly and positively correlated with Enforcement and most weakly correlated with Demandingness, whereas social skills were most strongly positively correlated with Responsiveness and most weakly correlated with Enforcement. Responsiveness was found to be the major predictor of learning motivation as well as social skills, and was strongly and positively correlated with both.

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1. INTRODUCTION

Families exert a major influence over their children's education and socialization. Over the years, numerous studies have sought to examine the meaning of "family" as a factor affecting children's development. Family characteristics, such as structure (single-parent, two-parent, remarriage), functioning, parental relationships and demographics (education, income, origin, size, etc.), as well as personality characteristics, have been investigated. Approximately three decades ago, family research began focusing on a new concept, "parenting style", a construct that captures a wide range of parental behaviours directed at children, with significant weight given to the effect on the child of each respective behaviour. The majority of studies on parenting style have stressed Demandingness and Responsiveness [1,2,3] or, alternatively, similar dimensions such as Parental Control and Authoritativeness [4]

Different combinations of these factors have led to the formulation of four classic parenting styles: Authoritarian, Authoritative, Permissive and Neglecting. These styles, themselves based on various forms of the exercise of authority, differentially affect children's education and socialization. The Authoritative style, characterized by the controlled exercise of authority, has been found to be positively associated with academic and social achievement [1,5,6] whereas the Authoritarian style (excessive use of authority), the Permissive style (minimal use of authority) and the Neglecting style (disregard of the child and his or her needs) have been shown to be negatively associated with such achievement [1,6].

The current research focuses on one specific aspect of parenting style in an attempt to identify those parental behaviours that, although involving the exercise of authority, are meant to impose self-regulation on children. We therefore differentiate here between *authority*, considered parents' skills in dictating and shaping appropriate behaviour, and *self-regulation*, taken as the daily exercise of authority in diverse spheres of children's skills [7,8].

Discipline or self-regulation in practice involves the setting of boundaries and the formation of appropriate social behaviour patterns. Taking this as our conceptual framework, we propose a new

concept, *Parental Discipline Style* (PDS), the behavioural patterns parents adopt when imposing discipline on their children. The type of discipline in question is the self-regulation that characterizes the child's behaviour. Self-Regulation is constructed of several components: The ability to exhibit normative behaviour toward others, to follow instructions and to set goals and persevere until they are reached, as well as the ability to practice and complete goal-oriented tasks even if they are considered unpleasant (e.g., math or grammar exercises); [9,10]. The main role of parents as primary socialization agents lies in the inculcation of such discipline. This leads to the question of how parents are to behave while imposing discipline and preparing their children to act in a disciplined or self-regulated manner. The beginnings of a response can be found in the differentiation between two analytic categories: Parenting style, which covers all parental behaviour toward the children, as opposed to PDS, which refers only to parents' discipline-oriented behaviours and how they go about inculcating discipline in their children.

PDS is a new construct; hence, there is little theoretical or empirical literature to support its construction. It does not appear as a separate concept although the term was mentioned in a similar format by Gallagher and Cartwright-Hatton [11], who nonetheless focused on comprehensive attempts to training discipline rather than on a distinctive and structured parental style.

This situation has complicated efforts to formulate the proposed construct. Hence, we turned to the research literature on related concepts, such as "parenting style", "authority" and "discipline". The new concept was therefore constructed on the basis of four dimensions that capture parental behaviour directed at imposing and inculcating self-regulation: Demandingness or *making demands*, Enforcement, Punishment and Responsiveness. These were examined on the basis of theory and research conducted separately on each dimension. Two dimensions, Demandingness and Responsiveness, had already been identified as elements of parenting style by Baumrind [1,2,3]. The innovation offered here is the linking of the four dimensions in one comprehensive construct. The specific components of PDS were selected from among the responses received on a specially devised, new questionnaire, the Parental Discipline Style

Questionnaire (PDSQ). We next describe these factors and their relationship to discipline.

1.1 Making Demands

Such behaviour expresses the degree to which parents require that their children complete a variety of the daily tasks deemed necessary for proper socialization and learning. Making demands represents a key concept in the education field, although beyond its inclusion as a component of parenting style [1,3,4], it is usually examined as either a distinct variable or as an educational policy [12,13].

1.2 Enforcement

This relates to the degree to which parents effectively monitor fulfilment of the demands made. This component is especially important in the exercise of discipline because the making of demands is ineffective without it.

1.3 Punishment

A rich body of research has focused on the punishment meted out by teachers and its negative influence on academic achievement, especially in the form of corporal punishment [14,15]. We should note here that our subject is not corporal or physical punishment but educational punishment, which includes denial of rewards or gratifications [16].

1.4 Responsiveness to the Child's Requests

Responsiveness refers to the extent to which parents acquiesce to children's requests. Baumrind [1,3] includes Responsiveness in her model of parenting style while stressing sensitivity to the child and honouring his or her requests, characteristics that bear witness to parental warmth, support of the child's autonomy and reasoned communication. This particular behaviour, other than its inclusion as a component of parenting, is mentioned in the research literature. A wealth of research does exist in reference to a related but broader concept, warmth [17,18]. Responsiveness to a child's requests provides a measure of legitimation to parental demands at the same time that it helps impose discipline.

The combination of these four components, outgrowths of parental authority, as opposed to the behaviour associated with individual

components, therefore encompasses what we have termed the Parental Discipline Style, a style quite different from the classic parental style described in the literature.

2. THE DIMENSIONS OF PARENTAL DISCIPLINE STYLE AND CHILDREN'S BEHAVIOUR

A critical review of the literature on these key concepts indicates several theoretical and empirical gaps. First, although a wealth of research has examined the effect of some components of control and support on children's behaviour, no empirical research to date has studied the effect of these components within the context of PDS. We therefore argue for the salience of examining each of these components within this behavioural framework. For example, parental punishment in an authoritarian environment may have a negative effect on children, whereas the same punishment delivered as part of an authoritative parental discipline style exhibiting high demands and enforcement but also responsiveness may have a positive effect [19,20].

Support for this argument can be found in research on the effect of punitive discipline on the child's sense of well-being conducted among mothers of fourth-grade children by Fletcher, Walls, Cook, Madison and Bridges [21]. These researchers found that when punishment was meted out in an atmosphere of warmth and support, the results were positive and not damaging, whereas punitive discipline, verging on coercion and imposed in an authoritarian atmosphere, had negative effects. In contrast, research conducted among mothers of 3-year-old children found that some level of behavioural problems was observed among children whose mothers adopted an authoritative parental discipline style. The authors of the latter research explained their results in terms of the young age of the children observed [22].

Second, from an empirical perspective, a wealth of research evidence has been collected on the various dimensions of control, such as punishment [23,24] and rejection [25]. However, little empirical research has been conducted on the specific dimensions of supportive parenting as a factor in PDS. Moreover, use of the respective concepts in this body of research has been inconsistent. For instance, in research where support was employed as a comprehensive concept, it was found to positively affect secure attachments and

developmental outcomes [26]. In another study, a lack of support contributed to problematic behaviour [27]. Although this result might be expected, the analytic scope of the concept differed from that found in other research, making it difficult to create a tight theoretical link between the two behaviours.

Some argue that the source of disagreement lies in methodological errors. For instance, research among children of parents who adopted an authoritarian and punitive parenting style [28,29], as well as studies among children whose parents adopted a permissive but neglectful parenting style [30,31] both found antisocial behaviour to be quite prevalent.

Third, the use of precise concepts such as responsiveness is fairly rare. Although research such as that conducted by Landry, Smith and Swank [32] explored the specific effect of responsiveness and found that it exerts a positive influence on the raising of infants, here too, the study was conducted in isolation of any specific PDS.

Finally, we should mention the numerous studies that have investigated the effect of parental behaviour on children's emotional and social development [25,33-36]. However, we still lack research examining the influence of PDS on more circumscribed issues, such as social skills and motivation.

3. PARENTING AND SOCIAL SKILLS

Children require social skills in order to communicate with others in the social environment, to form relationships and to become part of a group. The inculcation of social skills is a valid objective recognized by those educators and parents who are aware of the impact of these skills on the child's self-image and social success. Education systems have officially equated the importance of social skills with that of learning achievements. Parents, the child's primary socializing agents, can actively or passively contribute to the development of social skills [37-40].

Parents can contribute to the social skills of children at risk [41], including children with emotional and behavioural disabilities [42-44] and those with physical disabilities [38]. A parent's impact on these skills is most clearly observed among autistic children [39]. Israel's Ministry of Education, in recognition of parents' contributions to their children's development of

these skills, has established a series of workshops aimed at supporting parental efforts to achieve this objective [45].

In addition to social skills, the research also investigated, as stated, parents' contributions to learning motivation. Learning motivation is the desire to participate in learning processes such as doing homework and, like social skills, is stimulated most directly through parental modelling and socialization [46-49]. Learning motivation is the main factor for academic achievement, even beyond I.Q. When children are raised in a home that nurtures a sense of self-worth, competence and autonomy, they are more apt to accept the difficulties of learning [10].

The current research is meant to fill in some of the gaps in the literature by investigating the influence of each of the four dimensions listed above, considered inseparable parts of PDS. Their effect would be tested on two variables: Social skills and learning motivation. Based on the preceding literature review, we formulated two main hypotheses:

There is a relationship between a mother's discipline style and her child's learning

1. Motivation and social skills.
2. Children of mothers with higher levels of PDS (Demandingness, Enforcement, Punishment and Responsiveness) are more likely to demonstrate higher learning motivation and social skills

4. METHODS

4.1 Participants

The convenience sample, achieved through snowballing, included 99 mothers of children aged 8–12 years; all of the mothers were Jewish and Israeli, and their ages ranged from 30 to 50 years ($M=39.5$ years, $SD=4.66$ years). The majority of women were married (68%) and the remainder were divorced (32%); most had completed high school or college (approximately 84%), with most college-educated women holding at least a master's degree (83%). Almost all had average or above-average income (94%), with more than half being secular (57.6%) and of European or American origin (61.6%). Of their 129 offspring, the majority were boys (55.6%), 27.3% attended the fourth grade, 34.3% attended the fifth grade and 38.4% attended the sixth grade. The mothers were asked whether their child had been diagnosed with learning disabilities by a professional (a psychiatrist,

neurologist or qualified clinical psychologist). All children reported on in this study were never diagnosed with learning disabilities. The mothers were asked to choose to report on one of their children aged 8–12. If there was more than one child in this specific age group, the mothers were asked to arbitrarily choose one of them.

According to Van Voorhis and Morgan [50], a good-enough sample size for regression analysis will include at least 50 participants. Some rules of thumb argue that the sample size should include 50, plus a number of dependent variables; in this study, dependent variables included 10 items and thus the minimum sample size is 50 +10.

4.2 Procedure

The data were collected during 10 different meetings of a parenting workshop for mothers. Prior to the meetings, each participant in the research received a structured, anonymous self-completion questionnaire, to be returned upon its completion; the response rate was almost 90%. The questionnaire included items on parental authority in addition to items regarding their children's educational achievements, motivation regarding homework preparation and social behaviour. The mothers were given definitions of each of the questionnaire components. The behaviours were selected on the basis of a pilot study in which 15 mothers (other than those participating in the research) of children aged 8–12 years were asked to list 15 daily behaviours they considered subject to non-compliance. To prevent cultural bias, three mothers were chosen from each of five countries of origin: Israel, France, England, Canada and the United States. The mothers were randomly selected as part of a convenience sample based on indirect acquaintance. Ten behaviours were selected from the lists compiled for each dimension. The criterion for a behaviour's selection in the current research was its mention by mothers from at least three countries.

4.3 Research Variables and Measures

The research focused on two dependent variables: Learning motivation and social skills. Sociodemographic background data were collected in order to control for their influence on the dependent variables, thus enabling isolation of the effect of parenting style on learning motivation and social skills. The data were obtained by means of additional questions directed at the mother: The child's gender, mother's age, family status (married/divorced, etc.), education, average family income,

religiosity, nationality and ethnicity. In addition to reporting her child's grades, we asked each mother whether her child had been diagnosed with learning disabilities (in Israel, the category "learning disabilities" covers a range of diagnoses such as ADHD, ADS, conduct disorder and other cognitive disorders); and if so, at what age the child began receiving treatment and whether he or she was still doing so. With the exception of age, which is a continuous variable, all the other responses were coded as dummy variables: Child's gender (1=male; 0=female), mother's marital status (1=married; 0=all others), education (1=academic; 0=non-academic) and religiosity (1=observant; 0=secular).

The questionnaire referred to major learning behaviours, such as doing homework and attitudes toward grades. Each item included six statements: "Interested in earning good grades", "Feels sad when his/her grades aren't good", "Is interested in obtaining grades above those of his/her friends", "Invests time in preparing homework", "Is conscientious about completing homework assignments" and "Prepares homework only when his/her parents demand it." The mothers were asked to rank each of these statements along a 5-point Likert scale (1=almost never; 5=always). The questionnaire's empirical validity was tested according to the Principle Components Test [see 51], which yielded one factor for learning motivation (Eigenvalue greater than 1); this factor explained 78% of the variation found. An internal reliability test yielded a coefficient of $\alpha=.93$ for this factor within the framework of the research.

Social skills were measured by means of another questionnaire especially developed by Rachel Pasternak for this study's purposes. This questionnaire included four statements: "Classmates invite him/her to participate in activities", "Meets with friends after school", "Complains of confrontations with other children" and "Plans activities with friends." The mothers were asked to rank each of these statements along a 5-point Likert scale (1=very rarely; 5=very often). The questionnaire's empirical validity was tested with the Principle Components Test, which yielded one factor for social skills (Eigenvalue greater than 1); this factor explained 77% of the variation obtained. An internal reliability test yielded a reliability coefficient of $\alpha=.86$.

The two main independent variables in the study were PDS and socio-demographic background.

PDS was measured by means of a third questionnaire, also specially developed for the current research. This questionnaire contained 40 items aimed at identifying the parent's (in this case the mother's) specific PDS through responses pertaining to the four behavioural dimensions: Demandingness, Enforcement, Punishment and Responsiveness to the Child's Requests. Ten items were assigned to each of those four dimensions, with each item describing a behaviour commonly performed by children aged 8-12 on a daily basis: Brushing teeth, washing, watching television, playing on the computer, coming home on time, preparing homework at fixed hours, cleaning their room, clearing the table after meals, taking down laundry and being polite during conversations with parents (specifically, every mother reported, for about those 10 behaviours, her level of Demandingness, Enforcement, Punishment and Responsiveness to the Child's Requests).

The 99 mothers were asked to rank three of the four PDS dimensions on separate Likert scales: how often they made demands (1=never demanded; 5=always demanded), their level of enforcement (1=never enforced; 5=always enforced) and the level of didactic (not corporal) punishment meted out for noncompliance (1=never punished; 5=always punished).

Ten other items were provided to capture the fourth dimension, Responsiveness to the Child's Requests. At these ages, most of the children's requests concern buying things or spending money [see 52]: Buying clothes, buying shoes, buying toys, buying games, buying other expensive items, buying favourite foods, subscribing to a gym, trips abroad, family outings and release from chores. For each of these items, the mothers were again asked to describe their responses on a 5-point Likert scale (1=never; 5=always). Although fulfilling some of these requests can be quite expensive, the average or above-average incomes reported by the majority of the mothers in this study neutralized the potential bias.

The questionnaire's empirical validity was tested with the Principle Components Test. The results indicated that among the four dimensions, Responsiveness to the Child's Requests explained 72.4% of the variance, while Punishment explained 87.7%. An internal reliability test for each of the dimensions yielded high reliability coefficients, $\alpha=.95$ for Responsiveness and $\alpha=.95$ for each of the other three dimensions.

5. RESULTS

In order to test for the first hypothesis (a mother's discipline style is associated with her child's learning motivation and social skills), we first identified the different types of PDS [52]. Six styles were distinguished using a Likert scale: Authoritarian, Authoritative, Permissive, Neglecting, Progressive Authoritative and Punitive. These styles were differentiated by how they integrated the four parenting components: Demandingness, Enforcement, Punishment and Responsiveness to the Child's Requests. As shown in Table 1, a Punitive style contains low Demandingness, Enforcement and Responsiveness, but high Punishment; an Authoritative Progressive style contains low Punishment but high Demandingness, Enforcement and Responsiveness; a Neglecting style contains low Punishment, Demandingness, Enforcement and Responsiveness; a Permissive style contains low Demandingness, Enforcement and Punishment, but high Responsiveness; an Authoritative style contains high Demandingness, Enforcement, Punishment and Responsiveness; and an Authoritarian style contains high Demandingness, Enforcement and Punishment, but low Responsiveness. The scores on each parenting component were calculated as Z scores. A score less than zero was considered low, and above zero was considered high.

We next examined the differences in means (Z-score) obtained for the dependent variables for each of the six parenting styles identified. For this purpose we used the non-parametric Kruskal-Wallis test. The results appear as cross-tabulations between the six parenting styles and learning motivation as well as social skills (Table 2). This analysis indicated that significant differences appear among the six parenting styles with respect to the dependent variables: Learning motivation ($\chi^2 [5, 123] = 75.28, P \leq .000$) and social skills ($\chi^2 [5, 123] = 69.24, P \leq .000$). A Mann-Whitney U post-hoc test with a Bonferroni adjustment ($\alpha / 15 = .003$) revealed that an Authoritative parenting style is significantly different from the parenting styles (excluding the Progressive Authoritative style) for both learning motivation and social skills. A Neglecting parenting style is significantly different from an Authoritarian, Authoritative or Progressive Authoritative parenting style for both learning motivation and social skills. Finally, the Progressive Authoritative style is significantly different from the Permissive, Neglecting and Punitive parenting styles.

Table 2 indicates that the children of mothers adopting the Authoritative or Progressive Authoritative styles exhibited the greatest learning motivation (0.88 and 0.77, respectively) and the highest level of social skills (0.85 and 0.69, respectively) among all the children in the sample, whereas children of mothers adopting the Neglecting or Punitive styles exhibited the least learning motivation (-0.89 and -0.99, respectively) and the lowest level of social skills (-0.86 and -1.13, respectively). The levels for children of mothers adopting the Authoritarian style revolved around a mean of -0.13 for learning motivation and 0.00 for social skills. However, the standard deviation from the mean for this group was particularly high (1.02 for learning motivation and 1.06 for social skills). These findings confirm the first research hypothesis.

In order to map the six PDSs in reference to the two dependent variables, a two-step cluster analysis was performed. The results are shown in Table 3, which is further discussed later.

Fig. 1 shows that different PDSs have similar effects on children's learning motivation and social skills. The figure indicates that the Progressive Authoritative and Authoritative styles have a positive effect (0.75 and 0.74, respectively) on learning motivation and on social skills (0.78 and 0.79, respectively) relative to other discipline styles. The same figure indicates

that the style having the most negative effect on learning motivation among the six is the Neglecting style (-0.94 for learning motivation and -1.1 for social skills).

Another interesting finding illustrated in Fig. 1 is that the Permissive and the Punitive discipline styles belong to the same group with respect to the quality of their influence on the dependent variables. This means that these two styles are related to the variance of a child's learning motivation and social skills in the same way as children of mothers exhibiting either a Permissive or a Punitive discipline style express similarly poorer learning motivation and social skills.

Analysis of the data therefore confirmed the first research hypothesis in full, meaning that children of mothers adopting an Authoritative discipline style exhibit the greatest learning motivation and the highest level of social skills relative to children of mothers adopting the other five styles. The analysis also showed that children of Neglecting mothers exhibit the poorest learning motivation and social skills relative to children of mothers adopting the remaining styles. In addition, the analysis indicated that the Progressive Authoritative and the Authoritative styles, as well as the Permissive and the Punitive styles, are very similar to the Authoritative style in their impact on the dependent variables.

Table 1. Components of parental discipline style

Component	Punitive	Authoritative progressive	Neglecting	Permissive	Authoritative	Authoritarian
Demandingness	Low (-1.1)	High (.74)	Low (-1.2)	Low (-1.9)	High (.64)	High (.66)
Enforcement	Low (-1.1)	High (.51)	Low (-1.2)	Low (-.86)	High (.77)	High (.85)
Punishment	High (.66)	Low (-.46)	Low (-1.3)	Low (-1.4)	High (.66)	High (.85)
Responsiveness	Low (-1.3)	High (.88)	Low (-.73)	High (1.2)	High (.71)	Low (-.69)

Notes: High score = mean standard deviation and above (=0); Low score = standard deviation below the mean (<0). (z score)

Table 2. Means and standard deviations for learning motivation and social skills for six parental discipline styles (PDS)

PDS	Learning motivation		Social skills	
	M (SD)	Kruskal- Wallis test mean rank	M (SD)	Kruskal- Wallis test mean rank
Authoritarian(n=19)	-.13 (1.02)	59.26	.00 (1.06)	56.24
Authoritative(n=43)	.88 (.37)	88.13	.85 (.51)	86.78
Permissive(n=9)	-.98 (.53)	21.67	-.01 (.93)	59.83
Neglecting(n=23)	-.99 (.45)	27.35	-1.13 (.52)	22.57
Progressive authoritative (n=17)	.77 (.64)	89.09	.69 (.59)	86.91
Punitive(n=15)	-.89 (.61)	29.13	-.86 (.43)	31.37

Note: *The data appearing in this table were obtained after standardizing the variables comprising components of the Parental Discipline Style, learning motivation and social skills

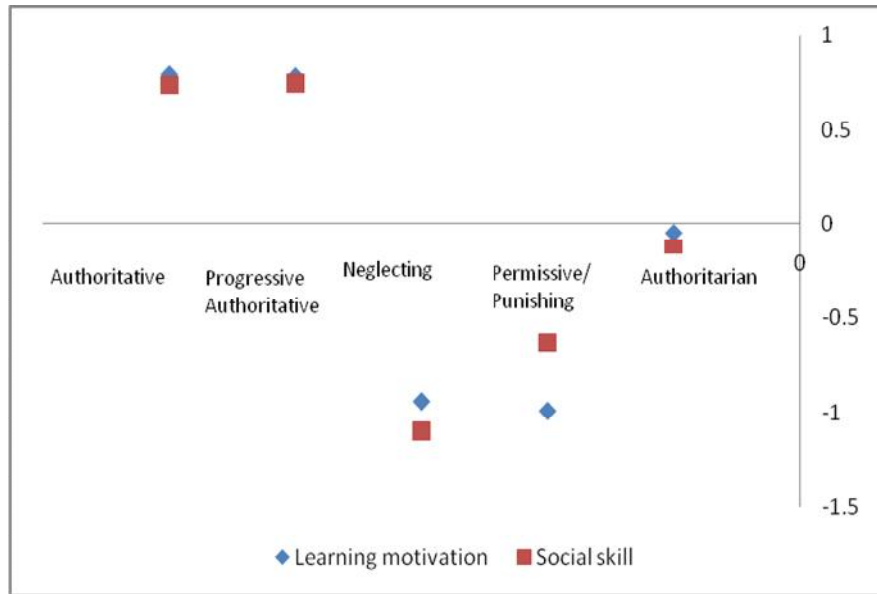


Fig. 1. Two-step cluster analysis for learning motivation and social skills

Note: Mean learning motivation=0.32; Mean social skills= 0.28

The second research hypothesis stated that the dimensions of PDS (Demandingness, Enforcement, Punishment and Responsiveness) are positively associated with learning motivation and social skills; the dimension having the strongest correlation with the two dependent variables is the mother's Responsiveness to her child's requests and the weakest association is Punishment. The hypothesis was investigated in two separate analyses. The first included calculation of a Pearson correlation coefficient between the four dimensions of PDS and learning motivation as well as social skills. For this purpose, a dummy variable was computed for each PDS. According to Long and Freese [53], in order to use a category-nominal variable as an independent variable in a regression model, a set of binary variables is computed. In this study, the category serves as the reference category.

The second analysis included performance of a hierarchical regression in order to estimate the quality of the association between the four dimensions and the dependent variables after controlling for the mothers' sociodemographic characteristics.

Table 3 indicates that all dimensions of PDS were highly correlated with learning motivation and social skills (coefficients ranging between .32 and .73). However, it appears that Punishment was weakly correlated ($r=.44$) with learning motivation but even more weakly with

social skills ($r=.32$). In contrast, Enforcement was very strongly correlated with learning motivation ($r=.73$) but somewhat less strongly with social skills ($r=.62$).

Table 3. Pearson correlations for parental discipline style components, learning motivation and social skills

PDS component	Learning motivation (n=129)	Social skills (n=129)
Demandingness	** .68	** .59
Enforcement	** .73	** .62
Punishment	** .44	** .32
Responsiveness	** .63	** .61

* $p \leq 0.05$; ** $p \leq 0.01$

In order to estimate the strength of the correlation between the four dimensions of PDS and learning motivation and social skills while controlling for the mother's background variables, a hierarchical regression analysis was performed with two models. One model included only the sociodemographic background variables and the other model consisted of the sociodemographic background variables in addition to the four dimensions of PDS. The purpose of this analysis was twofold: First, to examine the contribution of the PDS dimensions to predicting a child's learning motivation and social skills beyond the contribution of sociodemographic variables, and second, to estimate the relative weight of each PDS comprising the model. We expected this analysis to reveal which components of PDS had

the greatest influence on the dependent variables independently of the mother's sociodemographic characteristics. Table 4 shows the findings of these analyses.

The results of Model I, comprised solely of sociodemographic variables, explained 18% of the variance in learning motivation. The model's results indicate that only the mother's religiosity made a significant but negative contribution ($\beta=-.27$) to predicting the dependent variable. Hence, we can conclude that children of secular mothers tend to exhibit greater learning motivation in comparison to children of observant mothers. Although the other background variables made no significant contribution to predicting learning motivation, children of married mothers ($\beta=.16$) who were European-American in origin ($\beta=.16$) and had more education ($\beta=.18$) were more likely to develop high learning motivation.

Model II, which combined the mother's sociodemographic characteristics with the four dimensions of PDS, explained a greater percentage of the variance (about 74%) in learning motivation. Examination of the results indicated once more that among the sociodemographic variables, only the level of religiosity made a significant yet negative contribution ($\beta=-.17$) to the model, again indicating that children of secular mothers exhibit greater learning motivation in comparison with children of observant mothers. Among the four dimensions of PDS, Enforcement ($\beta=.50$) and Responsiveness ($\beta=.38$) made significant and sizeable contributions to predicting learning motivation. It thus appears that mothers who

enforce discipline (but without punishing for infringements) and simultaneously respond to the child's needs tend to contribute to their child's learning motivation. Furthermore, Demandingness ($\beta=.01$) and Punishment ($\beta=.10$) made no significant contributions to the model's predictive power.

Model I's results with respect to social skills nonetheless diverged from the results obtained regarding learning motivation, although it predicted a similar amount of variance, about 16% regarding the level of social skills as opposed to 18% regarding learning motivation. Here as well, the mother's level of religiosity makes a significant and negative contribution to predicting the child's social skills, but so did the mother's family status ($\beta=-.25$). We can therefore conclude that children of secular mothers or married mothers are more likely to exhibit higher levels of social skills when compared to children of observant mothers or unmarried mothers (e.g., divorce or volitional single parenthood). The other sociodemographic background variables (ethnic origin, religiosity and child's gender) made no significant contribution to the model. However, the emerging trend indicated that children of European-American origin ($\beta=.12$) and children of educated mothers ($\beta=.07$) were more likely to develop good social skills.

Similarly, Model II explained about 64% of the variance in social skills as opposed to 75% of the variance in learning motivation. A review of the model's results indicated that the mother's sociodemographic characteristics made no significant contribution to the model's predictive

Table 4. Hierarchical regression analysis of predictors of learning motivation

Variables	Learning motivation		Social skills	
	Model I ^a	Model II ^b	Model I ^a	Model II ^b
Family status	.16	-.06	** .23	.03
Religiosity	*-.27	*-.17	**-.25	-.12
Ethnicity	.16	.09	.12	.02
Child's gender	.08	.02	.03	-.03
Education	.18	.01	.07	-.09
Demandingness		.01		.20
Enforcement		** .50		.14
Punishing		.10		.19
Responsiveness		** .38		** .49
F	*4.0	**28.7	*3.4	**17.8
% of variance explained	17.7	74.4	15.5	64.3
R ² change	** .567		** .488	

Notes: ^aModel I includes only sociodemographic variables; ^bModel II includes sociodemographic variables and parenting style components, * $p \leq 0.05$, ** $p \leq 0.01$

power, and that Responsiveness ($\beta=.49$) was the sole PDS dimension making a meaningful and significant contribution to predicting social skills. In other words, social skills were well-explained by the model combining both sets of variables, although the only statistically significant variable was the mother's Responsiveness to the Child's Requests ($\beta=.49$). That is to say, social skills are affected more by how a mother responds to her child's requests but less by the other PDS dimensions (Enforcement, Demandingness and Punishment) or the mother's sociodemographic characteristics.

To summarize, these findings partially confirm the second research hypothesis. We found that all four dimensions of PDS were positively correlated with a child's learning motivation and social skills after taking the mother's sociodemographic characteristics into account. Enforcement exhibited the strongest correlation and Demandingness the weakest correlation with learning motivation; regarding social skills, the strongest correlation was with Responsiveness and the weakest was with Enforcement. Responsiveness, however, did make a significant contribution toward predicting the dependent variable and was strongly correlated with both independent variables. It was also found that of all the sociodemographic variables, only the mother's religiosity had a significant but negative effect on both dependent variables. That is, children of secular mothers tended to be more motivated to learn and exhibited higher levels of social skills.

6. DISCUSSION

The literature dealing with PDS and its relationship with a child's social skills and learning motivation is in its infancy. Moreover, the various studies already performed on parenting styles are inconsistent in their theoretical and operational definitions of core concepts such as "supportive parents" [26,27]. However, the empirical evidence does indicate a meaningful association between parenting styles and a wide range of behavioural, emotional [35,36] and social behaviours [33,25] exhibited by children. In this study, as well as in other studies in this field, many other variables can explain this relationship; however, the findings of the current research likewise indicated an association between PDS and children's social skills and learning motivation. The findings of this research indicate that two PDSs (Authoritative and Progressive Authoritative) were similar in their positive effect on learning motivation and

social skills, whereas two other PDSs (Neglecting and Punitive) were weakest in their impact on these variables. We suggest that these findings stem from the research design, which compared each PDS with the others in terms of its effect on the dependent variables. Hence, whereas the effects of the Punitive and the Neglecting styles were greatest, they diminished when compared to the Authoritative or the Progressive Authoritative styles, for example.

The findings also indicate that each parenting style had a similar effect (i.e., in the same direction) on both variables (for example, the Authoritative style had a positive effect on learning motivation as well as on social skills). Nonetheless, the Permissive parenting style had a somewhat different effect. That is, children of permissive mothers exhibited average learning motivation (below that of children of Authoritative or Progressive Authoritative mothers, but above that of children of Neglecting or Punitive mothers). The importance of this finding should, however, be viewed with circumspection due to the sample's size ($n=4$ children). These findings are apparently related to the mix of dimensions in this PDS: Low levels of Demandingness, Enforcing and Punishing and a high level of Responsiveness to the Child's Requests.

As to social skills, an especially strong association was found with parental Responsiveness. We suggest that parents adopting this style (Permissive) are unable to encourage learning motivation because they do not make sufficient demands of their children and because they lack Enforcement and Punishment skills. In addition, due to the high level of Responsiveness characterizing this style, such parents are able to endow their children with higher levels of social skills when compared with other styles, such as the Punitive and the Neglecting.

Findings from other studies [see for example [33], together with the current study, indicate that children of mothers adopting an Authoritative or a Progressive Authoritative style (the two being similar) tend to be more socially skilled and motivated to learn. Alternatively, children of mothers exhibiting a Punitive or a Neglecting PDS tend to exhibit lower motivation and poorer social skills.

One explanation for these findings apparently lies with the second research hypothesis regarding the differential association between the dimensions of PDS (Demandingness, Enforcing,

Punishment and Responsiveness) and the dependent variables. The current research revealed the presence of distinctive connections between the separate PDS dimensions and learning motivation as well as social skills. The main variable found that to predict learning motivation, other than selected sociodemographic characteristics, was Enforcement. In contrast, the most meaningful predictive variable with respect to social skills was Responsiveness. In two PDSs, Authoritative and Progressive Authoritative, the dimensions of Responsiveness and Enforcement dominated the results. However, even though these same components (Responsiveness and Enforcement) are present in the Authoritarian PDS, children of mothers applying this style exhibited average learning motivation and poor social skills in comparison to children of mothers applying the two previously mentioned styles. This finding is apparently rooted in the overall structure of the separate PDSs, especially the level of punishment that parents apply. In the two previous PDSs, punishment is rarely meted out, whereas in the third style, punishment is frequent. This finding has far-reaching theoretical and empirical implications because it indicates that when measured in isolation, any component of parenting, even if considered together with a child's developmental and behavioural characteristics, can provide only partial insights that may distort the finding's meanings.

Another interesting point raised by the current research is related to the great weight of parental Responsiveness to the Child's Requests in the development of social skills and learning motivation. This dimension was found to have high predictive power regarding the two dependent variables irrespective of the mother's sociodemographic characteristics or other components of PDS. Responsiveness relates to emotions, which strongly affect a child's development. In contrast to other components of parenting, Responsiveness can help the child develop assertiveness and avoid passivity. In other words, whereas Demandingness, Enforcement and Punishment express control, Responsiveness expresses support. Similar to the available literature [see for example [34], the current research indicates that children who grow up in responsive, supportive family environments tend to develop emotional and cognitive strengths that facilitate their development of high learning motivation (as expressed in high self-sufficiency and self-acceptance, for example), as well as good social skills (such as the capacity for empathy).

7. CONCLUSION

In conclusion, the control and support captured by the four dimensions of Demandingness, Enforcement, Punishment and Responsiveness provide the building blocks of PDS. In doing so, they also determine the outcomes of family education and socialization in general and the child's social skills and learning motivation in particular.

The results of this study should, however, be regarded with caution. The sampling was conducted in a non-probabilistic manner and the external validity of the findings is therefore limited. The mothers studied were fairly well-educated and had middle-to-high incomes, as well as high levels of academic achievement. Hence, the appropriateness of generalizing this study's results and conclusions to other populations or to other sociocultural contexts may be limited. It is possible that in lower-income neighbourhoods, some of the findings may not be replicated due to different lifestyles. Furthermore, the measure of social skills may not make sense in other sociocultural settings or for children of different ages. Another limitation refers to the sample, which was drawn from specific geographic areas in Israel, particularly from large cities. Populations from the periphery were thus underrepresented while other cultural groups in Israel, such as Jews of Ethiopian origin, the Druse and Bedouins, were not included in the sample. Another limit of this study is the absence of fathers. The results therefore may not be valid for fathers, even from the same socioeconomic background. Moreover, in this study, mothers were asked to answer the questionnaire, rather than their children. Thus, the information streaming from the data reflects the mother's perception, not necessarily the child's perception. Future studies may analyse two sets of data: The parent's and the child's perceptions. Differences, if they exist, might be an interesting field of study. Finally, using a quantitative methodology to study adaptive adult images of young, childless adults in Israel may have led to overgeneralization and the loss of important and interesting personal differences. Quantitative methodologies do not provide us with participants' explanations as to why they choose certain traits. Therefore, the "cultural logic" (the reasons given by socializing agents to explain why they choose to reinforce in their children a specific value, trait or behaviour that they regard as adaptive) is provided here by the researchers, not the participants, and it is highly speculative. On the basis of these limitations,

future research is recommended, such as studies combining quantitative and qualitative research methods. Further comparison of adaptive adult images between males and females in Jewish and Arabic groups, and between different ages and social classes, is likewise necessary. Finally, a longitudinal study of these groups may shed some light on the changes in adaptive adult images as these young adults become parents.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- Baumrind D. The influence of parenting style on adolescent competence and substance abuse. *Journal of Early Adolescence*. 1991;11(1):56-95.
- Baumrind D. The discipline controversy revisited. *Family Relations*. 1996;4(4):405-414.
- Baumrind D. Patterns of parental authority and adolescent autonomy. *New Directions for Child and Adolescent Development*. 2005;108:61-69.
- Steinberg L, Lamborn SD, Dornbusch SM, Darling N. Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement and encouragement to succeed. *Child Development*. 1992;63:1266-1281.
- Chao RK. Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development*. 2001; 72(6):1832-1843.
- Dornbusch SM. The relation of parenting style to adolescent school performance. *Child Development*. 1987;58(5):1244-1257.
- Gershoff ET, Grogan-Kaylor A, Lansford JE, Chang L, Zelli A, Deater-Deckard K, et al. Parent discipline practices in an international sample: Associations with child behaviors and moderation by perceived normativeness. *Child Development*. 2010;81(2):487-502.
- McElroy EM, Rodringuez CM. Mothers of children with externalization behavior problems: Cognitive risk factors for abuse potential and discipline style and practices. *Child Abuse & Neglect: The International Journal*. 2008;32(8):774-784.
- Gallagher B, Cartwright-Hatton S. The relationship between parenting factors and trait anxiety: Mediating role of cognitive errors and metacognition. *Journal of Anxiety Disorders*. 2008;22(4):722-733.
- Kissel A. Wasting away: Chicago's declining core. *Academic Questions*. 2009;22(3):298-313.
- Reback R. Demand (and supply) in an inter-district public school, the Choce Program. *Economics of Education Review*. 2008;27(4):402-416.
- Docan TN. Positive and negative incentives in the classroom: An analysis of grading systems and student motivation. *Journal of Scholarship of Teaching and Learning*. 2006;6(2):21-40.
- Little SG, Akin-Little A. Psychology's contributions to classroom management. *Psychology in Schools*. 2008;45(3):227-234.
- Meteyer KB, Perry-Jenkins M. Dyadic parenting and children's externalizing symptoms. *Family Relation*. 2009;58(3):289-302.
- Shanahan L, McHale SM, Crouter AC, Osgood DW. Warmth with mothers and fathers from middle childhood to late adolescence: Within- and between-family comparisons. *Developmental Psychology*. 2007;43(3):551-563.
- Deater-Deckard K, Ivy L, Petrill SA. Maternal warmth moderates the link between physical punishment and child externalizing problems: A parent-offspring behavior genetic analysis. *Parenting*. 2006;6:59-78.
- McLoyd VC, Smith J. Physical discipline and behavior problems in African American, European American, and Hispanic children: Emotional support as a moderator. *Journal of Marriage and Family*. 2002;64:40-53.
- Fletcher AC, Walls JK, Cook EC, Madison KJ, Bridges TH. Parenting style as a moderator of associations between maternal disciplinary strategies and child well-being. *Journal of Family Issues*. 2008;29:1724-1744.
- Paulussen-Hoogeboom MC, Stams GJM, Hermanns JMA, Peetsma T, van den Wittenboer GLH. Parenting style as a mediator between children's negative emotionality and problematic behavior in early childhood. *The Journal of Genetic Psychology*. 2008;169(3):209-226.
- Berns N, Schweingruber D, Cast AD. Childhood physical punishment and problem solving in marriage. *Journal of*

- Interpersonal Violence. 2006;21(2):244-261.
21. Leary CE, Kelley ML, Morrow J, Mikulka PJ. Parental use of physical punishment as related to family environment, psychological well-being, and personality in undergraduates. Published online, Springer Science; 2007.
 22. Pereira AIF, Canavarro C, Cardoso MF, Mendonc D. Patterns of parental rearing styles and child behavior problems among Portuguese school-aged children, *Journal of Child and Family Studies*. 2009;18:454–464.
 23. Coplan RJ, Hastings PD, Lagace-Seguín DG, Moulton CE. Authoritative and authoritarian mothers' parenting goals, attributions and emotions across different childrearing contexts. *Parenting: Science and Practice*. 2002;2:1-26.
 24. Rothbaum F, Weisz JR. Parental caregiving and child externalizing behavior in nonclinical samples: A meta-analysis. *Psychological Bulletin*. 1994;116:55-74.
 25. Grogan-Kaylor A. Corporal punishment and the growth trajectory of children's antisocial behavior. *Child Maltreatment*. 2005;10:283-292.
 26. Verona E, Sachs-Ericsson N. The intergenerational transmission of externalizing behaviors in adult participants: The mediating role of childhood abuse. *Journal of Consulting and Clinical Psychology*. 2005;73(6):1135-1145.
 27. Beck JE, Shaw DS. The influence of perinatal complications and environmental adversity on boys' antisocial behavior. *Journal of Child Psychology and Psychiatry*. 2005;46(1):35-46.
 28. Frick PJ. Developmental pathways to conduct disorder. *Child and Adolescent Psychiatric Clinics of North America*. 2006;15:311-331.
 29. Landry SH, Smith KE, Swank PR. Responsive parenting: Establishing early foundations for social, communication, and independent problem-solving skills. *Developmental Psychology*. 2006;42(4): 627-642.
 30. Casas JF, Weigel SM, Crick N, Ostrov JM, Woods KE, Jansen-Yeh EA, et al. Early parenting and children's relational and physical aggression in the preschool and home contexts. *Applied Developmental Psychology*. 2006;27:209–227.
 31. Morris AS, Silk JS, Steinberg L, Myres SS, Robinson LR. The role of the family context in the development of emotion regulation. *Social Development*. 2007; 16(2):361-388.
 32. Schwartz JP, Thigpen EE, Montgomery JK. Examination of parenting styles of processing emotions and differentiation of self. *The Family Journal*. 2006;14(1):41-48.
 33. Stack DM, Serbin LA, Enns LN, Ruttle PL, Barrieau L. Parental effects on children's emotional development over time and across generations. *Infants and Young Children*. 2010;23(1):52-69.
 34. Bandura A. *Social Learning Theory*. New York: Prentice-Hall; 1977.
 35. Bennett KS, Hay DA. The role of family in the development of social skills in children with physical disabilities. *International Journal of Disability, Development and Education*. 2007;54(4):381-397.
 36. Laugeson EA, Frankel F, Mogil C, Dillon AR. Parent-assisted social skills training to improve friendships in teens with autism spectrum disorders. *Journal of Autism and Developmental Disorders*. 2009;39(4):596-606.
 37. Richardson MJ, Caldarella P, Young BJ, Young EL, Young KR. Further validation of the systematic screening for behavior disorders in middle and junior high school. *Psychology in the Schools*. 2009;46(7): 605-615.
 38. Baker JK, Crnic KA. Thinking about feelings: Emotion focus in the parenting of children with early developmental risk. *Journal of Intellectual Disability Research*. 2009;53(5):450-462.
 39. Elison S, Stinton C, Howlin P. Health and social outcomes in adults with Williams syndrome: Findings from cross-sectional and longitudinal cohorts. *Research in Developmental Disabilities: A Multidisciplinary Journal*. 2010;31(2):587-599.
 40. Rutherford LE, Du Paul GJ, Jitendra AK. Examining the relationship between treatment outcomes for academic achievement and social skills in school-age children with attention-deficit hyperactivity disorder. *Psychology in the Schools*. 2008;45(2):145-157.
 41. Solanto MV, Pope-Boyd SA, Tryon WW, Stepak B. Social functioning in predominantly inattentive and combined subtypes of children with ADHD. *Journal of Attention Disorders*. 2009;13(1):27-35.
 42. De Rosier ME, Gilliom M. Effectiveness of a parent training program for improving

- children's social behavior. *Journal of Child and Family Studies*. 2007;16(5):660-670.
43. Grolnick WS. The role of parents in facilitating autonomous self-regulation for education. *Theory and Research in Education*. 2009;7(2):164-173.
44. Katz I, Kaplan A, Buzukashvily T. The role of parents' motivation in students' autonomous motivation for doing homework. *Learning and Individual Differences*. 2011;21(4):376-386.
45. Klauda SL. The role of parents in adolescents' reading motivation and activity. *Educational Psychology Review*. 2009;21(4):325-363.
46. Miller WB, Sable MR, Beckmeyer JJ. Preconception motivation and pregnancy wantedness: Pathways to toddler attachment security. *Journal of Marriage and Family*. 2009;71(5):1174-1192.
47. VanVoorhis CRW, Morgan BL. Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology*. 2007;3(2):43-50.
48. Cronbach LJ, Meehl PE. Construct validity in psychological tests. *Psychological bulletin*. 1955;52(4):281.
49. Pasternak R. Parental Discipline and Parents' Desire for Children's School Success. *Economic Stress and the Family, Contemporary Perspectives in Family Research*. (Emerald Group Publishing Limited). 2012;6:123-146.
50. Long JS, Freese J. Regression models for categorical dependent variables using Stata. Stata press; 2006.
51. Schaffer M, Clark S, Jeglic EL. The role of empathy and parenting style in the development of antisocial behaviors. *Crime & Delinquency*. 2009;55(4):586-599.
52. De Kemp R, Overbee G, de Wied M, Engels R, Scholte R. Early adolescent empathy, parental support and antisocial behavior. *Journal of Genetic Psychology*. 2007;168(1):5-18.
53. Jolliffe D, Farrington DP. Examining the relationship between low empathy and self-reported offending. *Legal and Criminological Psychology*. 2007;12:265-286.

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